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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/645,594 | 08/22/2003 | Hiroshi Ohata | 030984 | 9455 |

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EXAMINER

CLEVELAND, MICHAEL B

ART UNIT PAPER NUMBER

1762

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,594

Applicant(s)

OHATA ET AL.

Examiner

Michael Cleveland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4-5, 6/4, 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6/2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 112103.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 9/22/2005 is acknowledged.
2. Claims 4-5, 6/4, and 7-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/22/2005.

Specification

3. The disclosure is objected to because of the following informalities: Applicant is required to removed references to specific claims from pp. 4-7 of the specification because the nature of the claims is likely to change during prosecution. Applicant may wish to substitute the language referring to the claims with appropriate language such as, "according to a first embodiment...".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Pichler et al. (U.S. Patent 6,949,389, hereafter '389).

'389 teaches a protection film forming method of forming at least two layers of protection films (506, 508) for covering an electronic component (504) mounted on a surface of a substrate (502) comprising:

a film forming step where a mask having an opening corresponding to the electronic component mounted on the surface of a substrate is disposed apart from said substrate by a

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predetermined first distance (Fig. 5), and a film forming material is deposited through the opening of said mask onto said substrate and the electronic component as a first layer (506) of protection film; and

a film forming step where said mask is disposed apart from said substrate by a second distance longer than said first distance, and a film forming material is deposited through the opening of said mask onto said substrate and the electronic component as a second layer of protection film for covering beyond the first layer of protection film

wherein the steps are performed in turn, thereby at least forming the first layer of protection film for covering beyond the first layer of protection film (Fig. 5 and col. 6, line 53-col. 7, line 14).

Claim 2: Deposition is through the mask. Accordingly, the mask must be between the source and the substrate. '389 does not suggest moving the position of the deposition mask relative to the substrate.

6. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Pichler et al. (U.S. Patent 6,911,667, hereafter '667).

'667 contains the same teachings as '389 (Fig. 5, col. 7, line 42-col. 8, line 2), but further explicitly teaches the deposition of more than 2 barrier layers with each successive layer covering more area (col. 10, line 23-col. 11, line 30; Fig. 8).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler '389 in view of Weaver (U.S. Patent 6,664,137, hereafter '137).

'389 is discussed above, and further teaches more barrier layers or planarization layers may be used (Abstract, col. 8, lines 21-30, col. 8, lines 46-57), but does not explicitly teach that each layer cover successively more territory. '137 teaches that when providing protection for organic EL device with multiple planarization and barrier layers, improved protection is provided by making each layer extend beyond the previous layer to touch the underlying substrate (col. 2, lines 1-54, Figs. 6-7, col. 6, lines 53-61).

10. Claim 6/2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler '389 in view of Antoniadis et al. (U.S. Patent 5,902,688, hereafter '688).

'389 is discussed above, but does not explicitly teach that crucibles for multiple materials are located in the same chamber, where each a shutter on each crucible is opened for the deposition step. However, Antoniadis '688 teaches that in constructing electroluminescent devices, using vacuum deposition of several consecutive layers without breaking the vacuum offers better reliability and economy of scale (col. 2, lines 50-63; col. 9, lines 15-38) and that this process may be achieved by using multiple evaporation sources for each layer disposed in a single chamber (Fig. 10) with shutters (173) that open for each materials deposition (col. 9, lines 15-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a source for each film in the same chamber in order to have provided better reliability and economy of scale, and to have supplied them with shutters to have controlled the timing of each deposition for the reasons given by '688.

11. Claim 6/2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler '667 in view of Antoniadis '688 for substantially the same reasons given immediately above.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Cleveland
Primary Examiner
Art Unit 1762

11/8/2005